

Application No. 10/645646
Reply to Office Action of January 18, 2006

Amendments to the claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-57. (Canceled)

58. (New) A method of using an eraser that comprises an elastic material formed of an eraser composition containing at least one of a rubber component or a resin component, and a skeleton structure of a porous structural material provided with skeleton portions constituted by organic polymer and void portions, the elastic material being present at void portions of said skeleton structure, the method comprising rubbing handwriting with said eraser, breaking portions of the skeleton structure at an abrasion surface of said elastic material while abrading said elastic material, letting eraser scraps of said elastic material take in broken portions of the skeleton structure and separating the eraser scraps in a collected manner, thereby erasing said handwritings.

59. (New) The method as set forth in claim 58, wherein the skeleton structure is continuous.

60. (New) The method as set forth in claim 58, wherein the elastic material for erasing has a filling rate in a range from not less than 50 % to less than 100 % with respect to an entire volume of the void portions of the porous structural material.

61. (New) The method as set forth in claim 58, wherein the porous structural material and the elastic material for erasing are integrated into a composite part.

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62. (New) The method as set forth in claim 58, wherein the skeleton portion of the skeleton structure has an average thickness of 1 to 100 μ m.
63. (New) The method as set forth in claim 58, wherein the void portion of the skeleton structure has an average pore size of 10 μ m to 3 mm.
64. (New) The method as set forth in claim 58, wherein the porous structural material contains a cross sectional shape with virtually polygonal or virtually circular cells.
65. (New) The method as set forth in claim 58, wherein the porous structural material is foamed structural material.
66. (New) The method as set forth in claim 58, wherein the porous structural material is a mesh structural material.
67. (New) The method as set forth in claim 66, wherein the porous structural material is a stereoscopic mesh structural material
68. (New) The method as set forth in claim 58, wherein the porous structural material has a tensile strength of not more than 3 kgf/cm².
69. (New) The method as set forth in claim 58, wherein the porous structural material has an extension percentage of not more than 500%.
70. (New) The method as set forth in claim 58, wherein the porous structural material has a compression repulsive force of not less than 0.2 kgf.
71. (New) The method as set forth in claim 58, wherein the porous structural material has a tensile strength of not more than 3 kgf/cm², an extension percentage of not more than 500 %, and a compression repulsive force of not less than 0.2 kgf.

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72. (New) The method as set forth in claim 58, wherein the eraser comprises an elastic material for erasing selected from the group consisting of a rubber component, a resin component, and mixture thereof, and a skeleton structure, wherein the skeleton structure is constituted by a porous structural material, and composed of a skeleton portion and a void portion, and wherein the void portion is filled with the elastic material, and the skeleton portion is made from an organic polymer, and having a surface hardness of 50 to 80 as measured according to JIS S6050, a sticking strength of 1.5 to 20 kgf, a coefficient of friction of not more than 0.8 and a wear rate of not less than 1%.

73. (New) The method as set forth in claim 58, wherein at least one of the porous structural material and the elastic material for erasing is colored.

74. (New) The method as set forth in claim 58, wherein the skeleton structure is constituted by a plurality of blocks of porous structural materials.

75. (New) The method as set forth in claim 74, wherein the blocks have at least one shape selected from the group consisting of spherical, polygonal, and plate shapes.

76. (New) The method as set forth in claim 58, wherein the eraser is an exchanging-use eraser of a type selected from the group consisting of a feeding-type eraser, a knocking-type eraser, an eraser attached to an end of a mechanical pencil, and an electric-type eraser.

77. (New) The method as set forth in claim 58, wherein the eraser is attached to a feeding type eraser mechanism.

78. (New) The method as set forth in claim 58, wherein the eraser is attached to a knocking-type eraser mechanism.

79. (New) The method as set forth in claim 58, wherein the eraser is attached to a

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plug end portion of a mechanical pencil.

80. (New) The method as set forth in claim 58, wherein the eraser is attached to a holder of an electric-eraser.

81. (New) The method as set forth in claim 58, wherein the eraser comprises an elastic material for erasing selected from the group consisting of a rubber component, a resin component, and mixture thereof, and a skeleton structure, wherein the skeleton structure is constituted by a porous structural material, and composed of a skeleton portion and a void portion, and wherein the void portion is filled with the elastic material, and the skeleton portion is made from an organic polymer, and has a surface hardness of 50 to 80 as measured according to JIS S6050, a sticking strength of 1.5 to 20 kgf, a coefficient of friction of not more than 0.8 and a wear rate of not less than 1 %, said organic polymer contains thermosetting resin selected from the group of melamine-based resin, epoxy-based resin, urethane-based resin, and phenol-based resin, average thickness of said skeleton portion is 1 to 100 μm , average pore diameter of said void portion is 10 μm to 3 mm, and said eraser has a surface which is worn by rubbing against a surface of paper and erases letters.

82. (New) The method as set forth in claim 72, wherein said elastic material is a cured material of a composition in a sol-state which comprises a vinyl chloride-based resin and a plasticizer.

83. (New) The method as set forth in claim 72, wherein said elastic material is a cured material of a composition in a sol-state that comprises a vinyl acetate-based resin and a plasticizer.

84. (New) The method as set forth in claim 72, wherein the skeleton structure is continuous.

85. (New) The method as set forth in claim 72, wherein the elastic material for

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erasing has a filling rate in a range from not less than 50 % to less than 100 % with respect to an entire volume of the void portions of the porous structural material.

86. (New) The method as set forth in claim 72, wherein the porous structural material and the elastic material for erasing are integrated into a composite part.

87. (New) The method as set forth in claim 72, wherein the porous structural material contains a cross-structural shape with virtually polygonal or virtually circular cells.

88. (New) The method as set forth in claim 72, wherein the porous structural material is foamed structural material.

89. (New) The method as set forth in claim 72, wherein the porous structural material is a mesh structural material.

90. (New) The method as set forth in claim 72, wherein the porous structural material is stereoscopic mesh structural material.

91. (New) The method as set forth in claim 72, wherein the porous structural material has a tensile strength of not more than 3 kgf/cm^2 .

92. (New) The method as set forth in claim 72, wherein the porous structural material has an extension percentage of not more than 500 %.

93. (New) The method as set forth in claim 72, wherein the porous structural material has compression repulsive force of not less than 0.2 kgf.

94. (New) The method as set forth in claim 72, wherein the porous structural material has a tensile strength of not more than 3 kgf/cm^2 , an extension percentage of not more than 500 %, and a compression repulsive force of not less than 0.2 kgf.

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95. (New) The method as set forth in claim 72, wherein at least one of the porous structural material and the elastic material for erasing is colored.
96. (New) The method as set forth in claim 72, wherein the skeleton structure is constituted by a plurality of blocks of porous structural materials.
97. (New) The method as set forth in claim 92, wherein the blocks have at least one shape selected from the group consisting of spherical, polygonal, and plate shapes.
98. (New) The method as set forth in claim 72, wherein the eraser comprises an exchanging-use eraser of a type selected from the group consisting of a feeding-type eraser, a knocking-type eraser, and eraser attached to an end of a mechanical pencil, and or an electric-type eraser.
99. (New) The method as set forth in claim 58, wherein the handwriting is on paper.